DOCUMENT RESUME

ED 342 941 CE 060 496

AUTHOR Nichols, Paul C., III
TITLE Technology in Career Education (A Component of BINS).
PUB DATE Dec 91
NOTE 10p.; Paper presented at the American Vocational Association Convention (Los Angeles, CA, December 1991).
PUB TYPE Speeches/Conference Papers (150)

EDRS PRICE MF01 Plus Postage. PC Not Available from EDRS.
DESCRIPTORS *Career Counseling; *Career Education; Computer Assisted Instruction; *Computer Networks; Computer Software; *Computer Uses in Education; Distance Education; Educational Change; Education Work Relationship; Electronic Mail; High Schools; Modems; Online Systems; Optical Data Disks; Satellite Facilities; School Counselors; *Technological Advancement; Telecommunications
IDENTIFIERS Brunswick County Public Schools VA

ABSTRACT

The Virginia Department of Education conducted a survey of counseling programs in the state through the University of Ohio in 1990. Three conclusions were reached from the survey: (1) career counseling is not given in all school systems; (2) counselors prefer individual counseling sessions to group sessions; and (3) other school professionals do not know what counselors do. Counselors face a direct challenge to provide motivational career counseling. The primary technology tool used at Brunswick Senior High School (Virginia) is an interactive career program computer network. Four networks are in operation: administrative, computer lab, library, and vocational. The CD ROM (compact disk read-only memory) ties into computer use. Computers also communicate with modems using bulletin boards. Automated Labor Exchange allows students to conduct job searches, linking directly to a mainframe in Richmond (Virginia). Long-distance learning via satellite and laser disc technology are other ways that counselors work with students. Technology aids education in testing for special education needs, recordkeeping, communication, professional development, and public relations. (Brunswick career services for grades 10, 11, and 12 are outlined. The following references are listed: 8 computer programs; 1 CD ROM; 3 telecommunications; 13 laser discs; and 2 satellite programs.) (NLA)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED342941

TECHNOLOGY IN CAREER EDUCATION

(A Component of BINS)

Paul C. Nichols III
Director of Guidance
Brunswick Senior High School

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☐ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

"PERMISSION TO REPRODUCE THIS MATERIAL IN **OTHER THAN PAPER COPY** HAS BEEN GRANTED BY

P.C. Nichols

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

CE 060 476

Technology in Career Education.

The State Department of Education conducted a survey of Counseling programs in the Commonwealth of Virginia through the University of Ohio in 1990. The survey was answered by counselors, parents, teachers and administrators throughout the state. Results of the survey are now available. Three of the conclusions were that (1) career counseling is not given in all school systems, (2) counselors prefer individual counseling sessions to group sessions, and (3) that other school professionals, particularly teachers, do not have a clear understanding of what counselors do. [1]

Within the past two years a bold initiative called Challenge 2000 has challenged secondary educators to reform the education process in Virginia so that our graduates will be able to compete in a workplace vastly different from what it was prior to 1980. A similar initiative, Tech Prep, is now sweeping the Community College system. The charge is that technology has brought on a revolution in business and industry, as well as every other aspect of our lives. Americans, unwilling to change, are teaching the classes and using methods that produce citizens ready for the world of the 50's. The factory-type jobs of the 50's are quickly moving to third world nations. Agriculture, service, and even professional occupations that will be available in the U.S.A. demand technological skills in which American students fall far behind. [2]

Counselors in Brunswick County face a more direct challenge to provide motivational career counseling than the Challenge 2000 initiative. Local business and industry leaders pointed their fingers right in our faces and said "You have got to do something to better prepare students for work." We found that creative use of technology, the very thing that changed the world, helped us with the task.

There are many obvious advantages of using technology. First, the students train for the future while being involved in the education process. Second, technology is in itself a motivator for students.[3] Third, technology gives students access to more information. Finally, it makes the counselor's job much more fun.

---

[1]. Virginia Dept of Education, Guidance and Counseling Survey, 1990.

[2] Dr. Willard Daggett, Address, "Challenge 2000" conference, Richmond, Va., June 1990.

[3] Dan Lumley Ed.D, & Gerald Bailey Ed.D., "Improving Student Motivation", Electronic Learning, vol. 11, no. 3, (Nov. Dec. 1991), p. 14.

Many types of technology are available for use at Brunswick Senior High School. The Guidance Department has built a career program that uses each type in a precise, developmental, motif. As the counselors work with groups of students, they encourage the students to keep the results in a career file that can be updated from one year to the next as their plans develop. The information is kept in a career file in the guidance office. Students know that this information will be kept for five years beyond their graduation so that they can return from college, or any other training beyond high school, to upgrade their files and present them to potential employers.

The primary tool of our program is the Computer network. A network is a "bridge" that connects a number of computers so that they share the same software. The software program is kept on a central fileserver. Students can then pull up a program on any computer connected to the fileserver in the building. In addition, if the program is created to be "multi-user", a whole class of students can use the same program at the same time. This makes for excellent group counseling sessions involving career activities.

Sophomores are presented with career research based on the Emerging Occupations program. The program asks the students questions about their interests, talents, etc. When the questions are answered, the computer matches the input information with a list of careers that research indicates will be in demand for years to come. The students then do research on those careers.

During their junior year, students follow up on their research using the Virginia View. This not only confirms job possibilities, it also gives availability of those jobs in the Commonwealth of Virginia, educational requirements, and where that education is available. Those juniors who plan to attend college can begin to prepare for the college boards with the S.A.T. Preparation program.

During their senior year students make use of the College Scan V program to find colleges all over the United States that suit their needs. In addition, each senior is required to complete a Resume on either the Better Resume Writer or Perfect Resume Builder programs. These are kept with job and college applications in their files. They can be easily updated and reprinted. Brunswick County has the Financial Aid Scan IV for students and parents to go through to get an idea of financial aid possibilities. Finally, students are introduced to Please Understand Me, a personality profile based on the Meyers Briggs personality profile. This suggests career options that may suit their unique personalities.

The wonderful thing about the network is that it makes all types of programs and information available to everyone all over the building. This actually makes career education a part of the curriculum instead of an add-on because teachers have all of this career material literally in their rooms. All vocational programs are available to academic teachers. All academic programs available to vocational teachers so areas can be blended. Special Education

programs, remediation programs, and talented and gifted programs are accessible so these students can receive their benefit without being pulled out and labeled.

Four networks are in operation at Brunswick: administrative, computer lab, library, and vocational. The vocational, library, and academic networks are bridged together for just the reason mentioned. The academic network is kept separate because all student records are kept within it using The Columbia School System. This, too, is a tremendous advantage to counselors in scheduling and maintaining administrative duties quickly and efficiently. The guidance office is the only place in the school where both the Administrative network and the student networks are housed.

Brunswick has a computer on each teacher's desk which is connected to the student networks. In addition four computer labs with at least 20 computers each are available. At least one of these labs is available to the counselors each period of the day for group use.

Another type of technology, one that ties in to computer use, is C.D. Rom. Most persons have become familiar with C.D's (compact discs) as the replacement of music albums. The flawless sound reproduction they make available has caught the nation by storm. These mirror-looking disks are also flawless carriers of pictures and enormous volumes of words. An entire encyclopedia can be stored on one disk with pictures, text, and sound available by simply typing the subject into the keyboard. The research potential for career information (or any other type) in this medium is unbelievable. The wonderful thing is that students who would never take the time to open a book about careers will research using the C.D.Rom.

C.O.I.N. has a new integrated career research package available on C.D.Rom. At Brunswick, this is used as a follow-up program to what students do at all levels. The reason that it is follow-up is that it has built in a national college search, apprenticeship program search, etc. When students complete career test batteries such as the C.O.P.S. group or the A.S.V.A.B., the results can be fed directly into the C.O.I.N., and matching career information comes up directly.

Computers also communicate with each other via telephone lines using devices called modems. Various institutions and entrepreneurs have set up information stockpiles called bulletin boards which are accessible to the modems. Here, the amount of information available to counselors and students is literally limitless. Entire libraries are available for career research, post high school training information, financial aid information, etc. Counselors can communicate with each other about common interests or concerns. Some of these bulletin boards are free, such as VA.FEN set up by the Virginia Department of Education. Some, such as Compuserve or Prodegy, charge user fees. The information is worth the cost, if a

budget is available.

Brunswick Senior High School was the first school in the nation to use this type of technology job search. The school has worked with the Virginia Employment Commission to install A.L.EX. (Automated Labor Exchange). Students can come into the guidance department, sit at the computer, and link directly to the mainframe computer in Richmond. Through a series of menus students specify the jobs they are interested in. A list of those jobs then comes up on the screen showing location, education and experience required, and the wages. The student may print a copy of the jobs, take it to the local V.E.C. office and make contact. Jobs are listed from all over the U.S.A.

Long distance learning via satellite is another important tool in the career program at Brunswick Senior High. Old Dominion University, Virginia Tech, and the University of Virginia are just a few of the institutes pioneering excellent programs using this medium. Brunswick has participated in programs dealing with college application information, apprenticeship programs, and financial aid information. Often, these are offered in the evening when parents can participate. The live interaction via telephone or computer hookup is an essential part of this medium. Students know that, though far away, they are a integral part of the program as opposed to simply watching a video instruction program.

An excellent example of this was a program the State Department of Education produced, Career Education: Foundations for the Future. Parents, Counselors, and others were able to see the importance of career counseling as a lifelong process. The program presented excellent information, encouraged local group sessions, and gave opportunities for call in questions.

Schools that have put in Channel One have had cable run and televisions placed in most classrooms throughout the school building. The Counselor that plans carefully could arrange with teachers to show programs all over the building. Satellite, cable programs, or video shown to all classrooms, or specific classrooms can be used from one source. In fact, Whittle Communications is producing a College Tour program that is picked up via satellite and shown our students. Colleges from all over the nation are participating. We tape the program so students can come back and look again for more information.

Laser Disc technology is yet another medium that gives counselors great opportunities to work with students. Laser Discs are the same as compact discs, only larger because they are primarily used to store motion pictures. Level I Laser Disc uses the still or motion pictures like a video tape (except <u>much</u> clearer). Level III Laser Disc is hooked to a computer and allows the student to interact with the program. Actors present a real life problem. The student then selects an optional solution on the computer. The laser disc then plays what happens to the actors with that choice.

The student has the option of going back and selecting the other options to see what happens as well.

Brunswick uses an excellent career program on job skills using the laser disc medium, called Attributes of Successful Employability. The students love this program because the problems presented are so similar to situations they have faced on the job. We also use a series of disc's on Career Dress and Grooming, Self Esteem etc. Other excellent programs on chemical abuse and campus tours are also available.

The potential use of technology in career education is limitless. Programs will be created in each medium faster than counselors can keep up with them. New technologies will be developed. The opportunity to use the medium to our advantage, and to the student's advantage, will continue to grow and become more necessary.

In addition, career education is just the tip of the iceberg. I mentioned using the Columbia System to expedite administrative duties, such as scheduling, which educators are responsible for. In fact, technology is available to aid us in testing for special education needs, recordkeeping, communication, professional development, public relations, and the list goes on and on.

Counselors may not agree with the results of the State Department's survey, or with the proposals of Challenge 2000, Tech Prep, Workforce 2000, and the other similar recommendations for reform. (In fact, some of these show that counselors are doing a tremendous job. American students, although least prepared for the industrial workplace, report on surveys that they have the highest level of self-esteem[1]) The fact is,that changes are coming and we as counselors have the responsibility to prepare the students. We have the opportunity to use technology to help students, make group counseling easier, let teachers and others know what we are doing, and so much more.

---

[1]. Dr. Willard DAgget, report, Teacher In Service, Brunswick Senior High School, Lawrenceville, Va., 20 Sept. 1991.

	10th Grade	11th Grade	12th Grade
Computer Programs (networked)	Emerging Occupations	Virginia View	College Scan
			P.U.M. (Please Understand Me)
		S.A.T. Prep.	Resume Writer
			Financial Aid Scan IV
Career Batteries & Workbooks	C.O.P.E.S. (Followup of C.A.P.S and C.A.P.S)	After High School	A.S.V.A.B.
			Job Survival Kit/Program
Distance Learning (Satellite, Cable, & Video)	Preparing for Standardized Testing	Preparing for P.S.A.T. & S.A.T.	College Video Tour
			Application Process
			Financial Aid Info.
C.D. ROM	Career Research	College Research	Job Info.
(The new C.O.I.N. integrated career program is available on C.D.)			
Laser Disc	Career Prep Series	Crisis Inervention Series	Attributes For Successful Employability
Telecomputing Programs		Petersons Guide (vis mofem)	A.L.EX.

Marketable Skills Report, plus all data gathered from these, are kept in student's career file folder

Reference List

1. Computer Programs

Virginia VIEW	Virginia VIEW 205 W. Roanoke St. Virginia Tech Blacksburg, VA. 24061
Financial Aid Scan IV & College Scan V	National Educational Software 1879 Locust Drive Verona, Wisconsin. 53593
Better Working Resume Kit	Spinnaker Software One Kendall Square Cambridge, MA. 02139
Please Understand Me	Cambridge Career Products 723 Kanawha Boulevard East Charleston, W.Va. 25302
Perfect Resume Kit	Permax Systems Inc. 5008 Gordon Ave. # 2 Madison, Wisconson 53716
S.A.T. Prep.	Krell Software Co. Flowerfield Blvd. #7 Suite 10 St. James, NY. 11780
Emerging Occupations Interest Inventory	M.C.E. Inc. P.O. Box 458 Galesburg, Michigan 49053

2. C.D. ROM.

C.O.I.N. Career Guidance System	C.O.I.N. Educational Products 3361 Executive Parkway Suite 302 Toledo, OH. 43606

3. Telecommunications

A.L.E.X.	Virginia Employment Commission c/o Marie Hammer P.O. Box 1358 Richmond, VA. 23219
Compuserve	Compuserve 5000 Arlington Center Blvd. P.O. Box 20212 Columbus, OH. 43220

Va.PEN	Harold L. Cothern, Ed.D. Information Systems Virginia Dept. of Education P.O. Box 6Q Richmond VA 23216

4. Laserdisc
   A. Level III

Attributes for Successful Employability	Agency for Instructional Technology. Box A. Bloomington, IN. 47402
Career Prep. Series Positive Attitudes & Communication Dress and Grooming Applications, Resumes & Cover Letters Working with People Self Esteem Success	Emerging Technology Consultants Inc P.O. Box 120444 St. Paul, MN. 55112

   B. Level I

Alcohol Drugs & Kids Marijuana & Human Physiology Tobacco and Human Physiology Cocaine and Human Physiology Heroin and Human Physiology Self Esteem: Feeling Good About Self Stress: Learning How to Handle It.	Aims Media 6901 Woodley Ave Van Nuys, CA. 91406

5. Satellite Programs

Channel One	Whittle Educational Network 706 Walnut St. Knoxville TN. 37901
VA. Dept. of Education	Mr. Bill Rogers Virginia Dept of Education P. O. Box 6Q Richmond, VA. 23216

Parties who are interested in touring the technology at Brunswick Senior High School, please contact Mr. Paul C. Nichols, III at (804)848-4196.